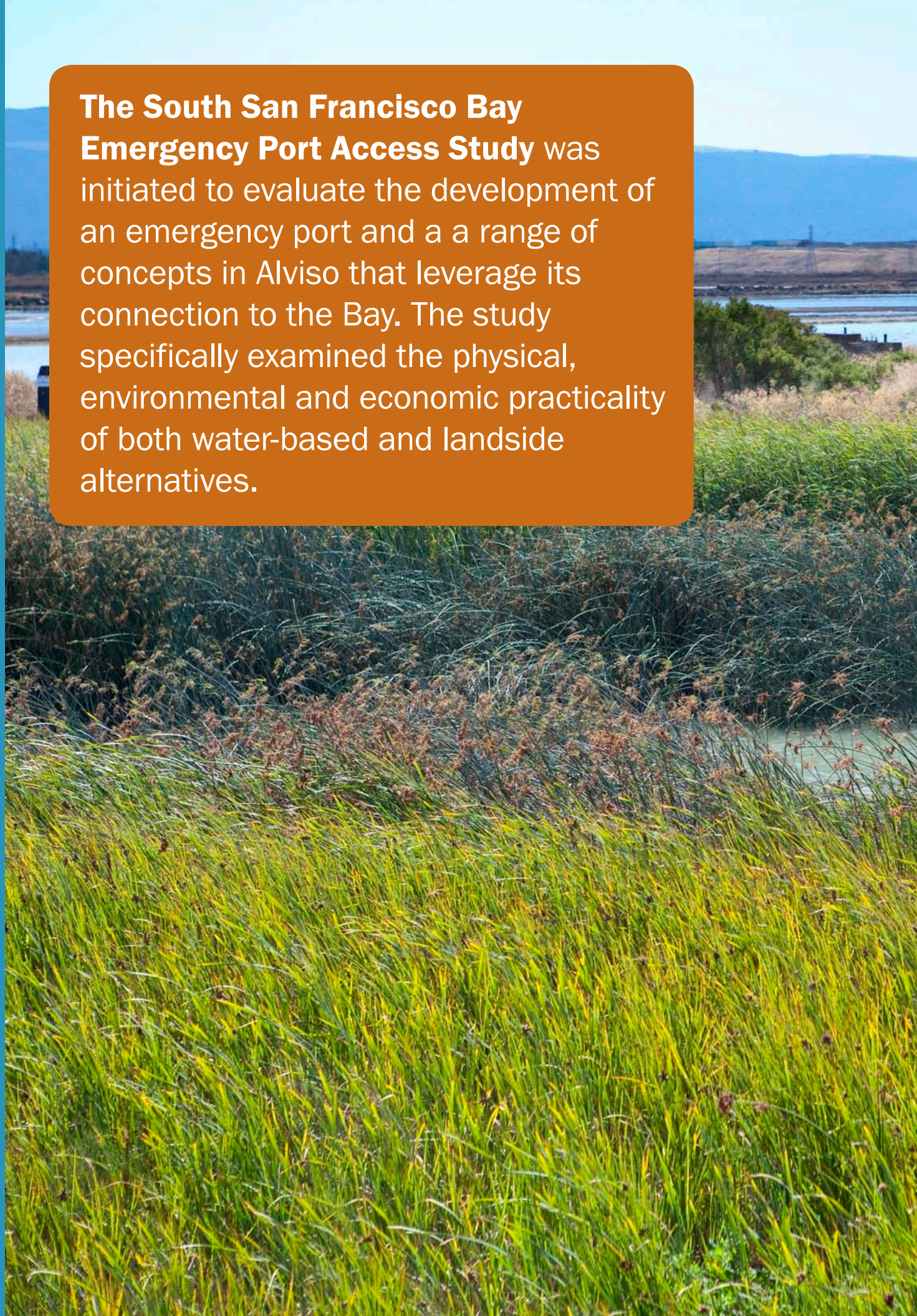
South San Francisco Bay
Emergency Port Access Study

Briefing Book · March 17, 2011

Contents

The South San Francisco Bay Emergency Port Access Study was initiated to evaluate the development of an emergency port and a a range of concepts in Alviso that leverage its connection to the Bay. The study specifically examined the physical, environmental and economic practicality of both water-based and landside alternatives.



Introduction

The community of Alviso is located at the northern edge of San José, on the southernmost portion of the San Francisco Bay (**Figure 1**). Established in 1848 as one of the West Coast's first ports, Alviso shipped agricultural, mining and lumber products from the Santa Clara Valley until the advent of the railroad several decades later. Steeped in history, Alviso contains a National Historic District with buildings that date back to the 19th century.

Figure 1. South San Francisco Bay, California

Source: AECOM

Today, the community occupies about 2,840 acres along the eastern bank of Alviso Slough and maintains a small-town feel, with only 2,300 residents (**Figure 2**). Although historically used for navigation, recreational boating and public access, sediment accumulation and vegetation encroachment over the last 25 years have led to a gradual decline in the channel width and overall depth of Alviso Slough, limiting use of the waterway (**Figure 3**). Several projects—notably the Santa Clara Valley Water District's (SCVWD's) Alviso Slough Restoration Project and the South Bay Salt Pond Restoration Project—are underway to restore tidal conditions and improve the aesthetics of Alviso Slough.

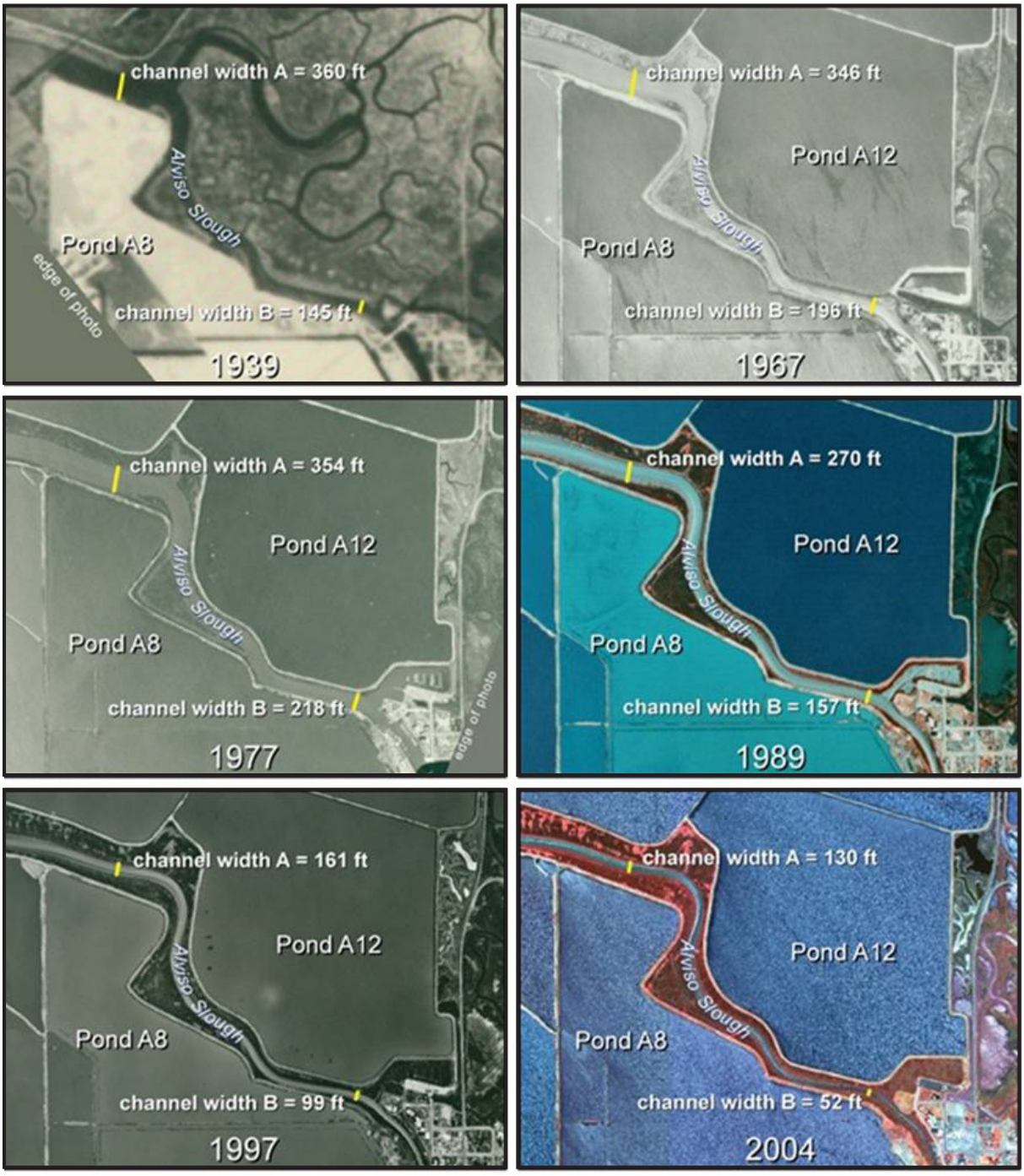
Alviso's proximity to the San Francisco Bay and small population make it unique within the highly urbanized San José metropolitan area. This uniqueness also presents opportunities, for both the community and the greater region. The South San Francisco Bay Emergency Port Access Study was initiated to evaluate the development of a range of concepts in Alviso that leverage its connection to the Bay. The study specifically examined the physical, environmental and economic practicality of both water-based and landside alternatives. The study identified two possible concepts that would benefit Alviso and the South Bay while retaining the community's unique character. An emergency port, served by a hovercraft, would expand the South Bay's capacity to respond to a major earthquake or other disaster by using the Bay as an additional access point. A waterfront destination with restaurants, retail and improved access to the Bay would attract residents from the surrounding area and provide economic development for Alviso. These two concepts recognize the need to protect the environment surrounding a National Wildlife Refuge in an urban setting.

Figure 2. Alviso, California

Source: AECOM

Led by the San Jose-Silicon Valley Chamber of Commerce and SCVWD, this study received grant funding from the US Department of Commerce, Economic Development Agency, with matching support from SCVWD, the City of San José and Santa Clara County. A Technical Advisory Committee with representatives from agencies and organizations in the South San Francisco Bay provided guidance throughout the project. Three public workshops gave community stakeholders opportunities to provide feedback on key findings throughout the study.

Figure 3. Alviso Slough, 1939-2004



Source: H.T. Harvey & Associates

AN EMERGENCY PORT, served by a hovercraft, would expand the South Bay's capacity to respond to a major earthquake or other disaster by using the Bay as an additional access point.

Methodology

This feasibility study evaluated an emergency port and a range of alternative concepts to identify the most promising for Alviso. The analysis occurred in three phases, with each phase delving into more detail than the last. The result was a narrowing of the range of alternatives concepts to those considered to be most promising.

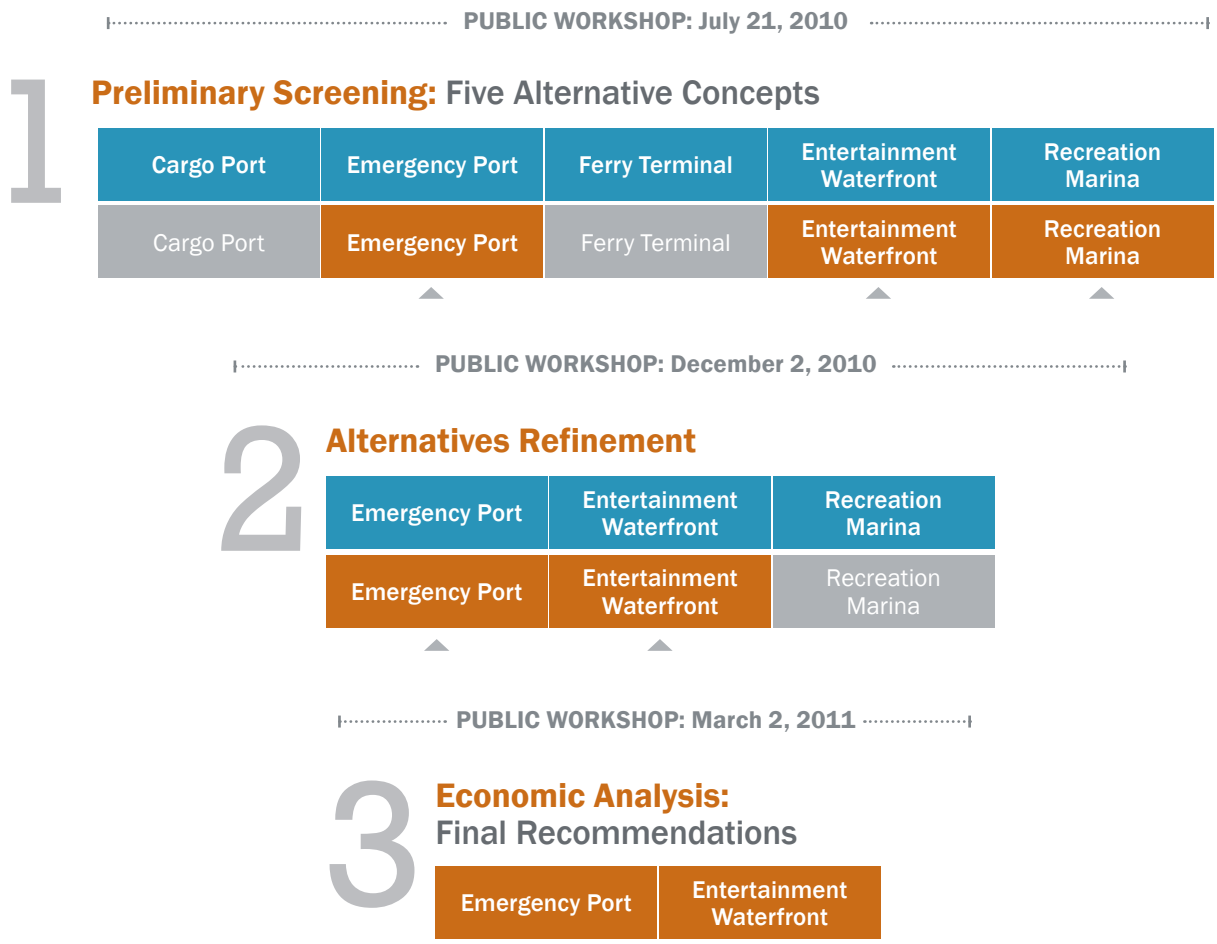
Scenario Testing

The three phases conducted as part of the feasibility analysis include the following:

1. **Preliminary Screening**
2. **Alternatives Refinement**
3. **Economic Analysis**

Analysis began with a preliminary screening of five alternative concepts: Cargo Port, Emergency Port, Ferry Terminal, Entertainment Waterfront and Recreation Marina. Subsequent levels of evaluation identified two concepts considered most feasible: Emergency Hovercraft Port and Entertainment Waterfront. **Figure 4** illustrates this approach.

Figure 4. Feasibility Study Methodology



Preliminary Screening

Preliminary screening evaluated the minimum physical, environmental and economic requirements for each of the five alternative concepts. Physical parameters included channel dimensions, landside facilities, transportation and access, as illustrated in **Table 1**. Environmental parameters hinged on the potential for environmental impacts, such as to water quality, wetlands and wildlife, and the necessary regulatory approvals.

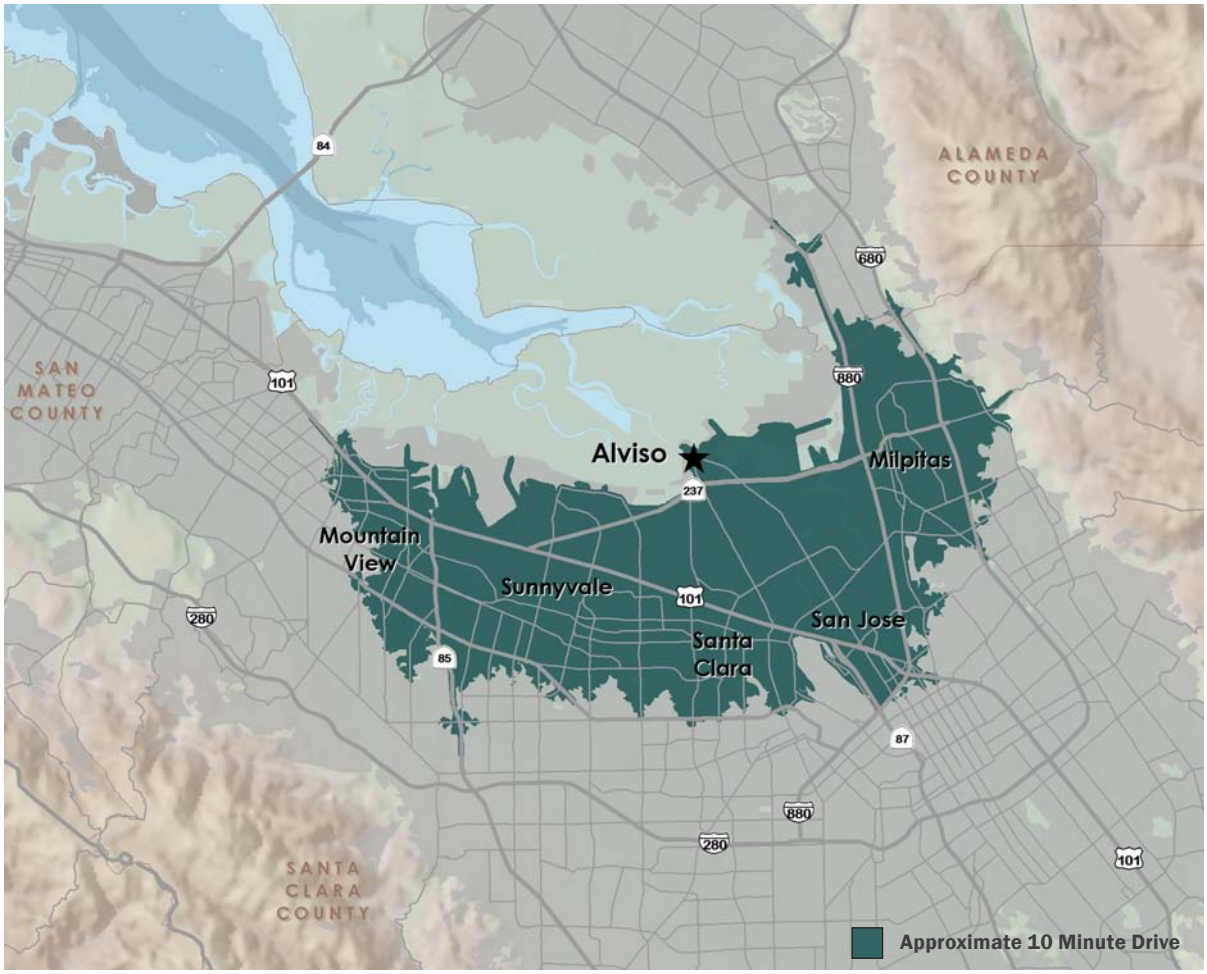
Table 1. Physical Parameters

Emergency Port	Cargo Port	Ferry Terminal	Entertainment Waterfront	Recreation Marina
Physical Dimensions				
• Varies with vessel • Regional standards • -8 ft depth (MLLW) • 100 ft channel width • 150 ft turning basin • Maintained channel	• -35 ft depth (MLLW) • 40 ft berth depth • 600 ft berth length • 900 ft turning basin	• -10 ft depth (MLLW) • 150 ft channel width • 250 ft turning basin • 110 ft x 42 ft float	• 150 ft width • 600 ft waterfrontage	• -8 ft depth (MLLW) • 75 ft width
Landside Facilities				
• Staging areas for evacuation + goods • Survivor shelter + care • Facility storage • Backup power + fresh water	• 10 acre footprint • 100,000 sq ft storage • 40,000 sq ft wharf • Loading space • Land use buffer • Utilities	• 4,200 sq ft terminal • Passenger loading • TOD within 2/3 mile • Utilities	• 75,000 sq ft retail, entertainment + restaurant • Adjacent residential, hotel, marina • Utilities	• 80-100% water area • Boathouse with dry storage for 4-5 boats per berth • Utilities
Transportation + Access				
• Availability of roads + alternate routes • Proximity to priority routes for reopening • Travel time • Alternative transportation	• 40,000 sq ft parking • Proximity to freeway • Proximity to rail	• 60,000 sq ft parking • Intermodal linkages to landside transit	• 120,000 sq ft parking • Access to regional roadway system	• 0.5 - 0.6 parking spaces per berth

Source: AECOM, Noble Consultants Inc.

Economic parameters depended primarily on the market area (or service area, in the case of an emergency port) for each alternative concept. **Figure 5** illustrates the market area for the Entertainment Waterfront concept, defined as the area within a 10-minute drive of Alivso, which is likely to contain the primary users of the retail offerings proposed for the Alviso waterfront. Preliminary screening of the physical requirements and environmental constraints identified three concepts for further evaluation: Emergency Port, Recreation Marina and Entertainment Waterfront.

Figure 5. Entertainment Waterfront Market Area



Source: AECOM

A WATERFRONT DESTINATION with restaurants, retail and improved access to the Bay would attract residents from the surrounding area and provide economic development for Alviso.

Alternatives Refinement

Refinement of the three alternative concepts included a more detailed engineering review of the physical requirements. This phase of the analysis focused on the physical configuration of the Emergency Port, Recreation Marina and Entertainment Waterfront concepts. Given the limited depth of Alviso Slough and its distance to the Bay (approximately 4.5-miles), most water-based concepts would require considerable dredging. The alternatives refinement phase considered a range of options within both the Emergency Port and Recreation Marina concepts in order to identify the dredging needs for different types of watercraft. **Table 2** illustrates requirements for channel dimensions, initial and maintenance dredging, vegetation removal and mitigation for five options. The extensive dredging required for each option, coupled with the potential for contaminated sediments (which may require disposal in off-site landfills), carry high costs. This, combined with the challenges associated with permitting new dredging projects, rendered these concepts infeasible. However, an Emergency Port served by a hovercraft and the Entertainment Waterfront rose to the top as two concepts that would not require dredging. To the extent that the South Bay Salt Ponds Restoration Project results in self-scouring of Alviso Slough, the development of a marina may become feasible in the long-term. Based on preliminary modeling of the slough post-restoration, one-time and ongoing dredging would still be required to achieve a minimum low tide depth of minus six feet.

Table 2. Required Dredging and Vegetation Removal

Concept	Emergency Port			Recreation Marina	
Option	**Emergency Craft**	**Ferry**	**Barge**	**Recreational Craft**	**Reduced Recreational Craft**
Required Channel Dimensions					
Depth x width (ft, MLLW)	-6 x 100	-10 x 100	-12 x 120	-8 x 100	-6 x 80
Initial Dredge Volumes					
Veg removal area (ac)	15	27	41	21	9
Veg removal volume (cy)	48,000	86,400	131,200	67,200	28,800
Sediment removal volume (cy)	630,000	1,370,000	2,140,000	980,000	430,000
Mitigation (ac)	30	54	82	42	18
Maintenance Dredge Volumes					
Sediment removal volume (cy)	84,000	87,000	104,000	87,000	67,000

Source: AECOM, Noble Consultants Inc., PWA ESA, Inc.

Benefit-Cost Analysis

The final phase of analysis evaluated the present value of the total public investments versus the present value of the overall economic benefits of the Emergency Hovercraft Port and Entertainment Waterfront concepts to the South Bay. This phase also entailed additional refinement of the two alternative concepts. Evaluation of the Emergency Hovercraft Port concept estimated the increased capacity for emergency response in the event of a major disaster, such as a catastrophic earthquake, relative to the required capital and operational expenses. For the Entertainment Waterfront concept, the analysis compared both the direct fiscal benefit to the City of San Jose and the estimated economic injection in direct earnings to Santa Clara County against the public costs to prepare the property for development and to make open space improvements to the waterfront. The analysis estimated the net present value of the two concepts over the long term and determined the overall benefit-cost ratio (benefits divided by costs) of each.

Figure 6. Emergency Hovercraft Port Conceptual Plan

Source: AECOM

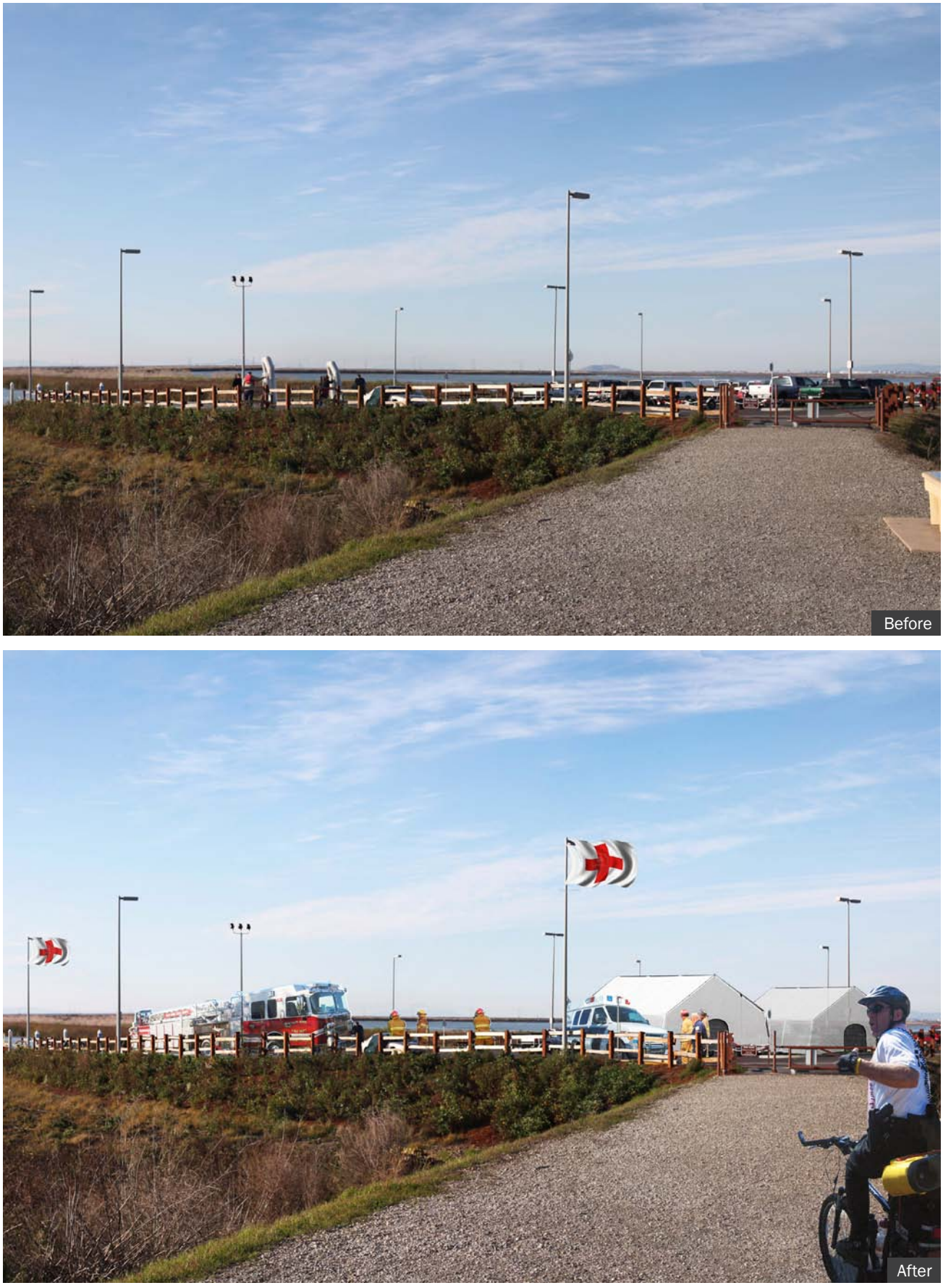
Feasible Scenarios

The benefit-cost analysis found that both the Emergency Hovercraft Port and Entertainment Waterfront concepts would create a net benefit for the South Bay. Both concepts have a benefit-cost ratio above 1.0, indicating that the benefits outweigh the public investment costs.

Emergency Hovercraft Port

The primary objective of the Emergency Hovercraft Port concept is to allow for the transport (import and export) of people, goods and/or emergency supplies following a catastrophic event, such as a major earthquake. The Emergency Hovercraft Port concept would serve primarily as an access point for first response personnel (e.g., police, fire and medical services). The concept would also provide limited "recovery transportation" via a ferry between Alviso and San Francisco following the initial first response period. The Emergency Hovercraft Port concept also considers an optional long-term ferry that would involve regular use of a hovercraft to and from Alviso. The concept would contribute to redundancy of emergency response in the South Bay, increasing the area's capacity for emergency response. The Emergency Hovercraft Port concept would serve the population closest to the Bay and complement the area's existing emergency network (e.g., San José International Airport, hospitals) and the Water Emergency Transportation Authority, which oversees emergency response on the Bay. **Figure 6** illustrates a conceptual plan for the Emergency Hovercraft Port concept. **Figure 7** and **Figure 8** present before and after simulations of the staging and loading areas.

Figure 7. Emergency Hovercraft Port Staging Area



Source: AECOM

Figure 8. Emergency Hovercraft Port Loading Area

Source: AECOM

The Emergency Hovercraft Port concept would have net benefits for the South Bay, increasing its capacity for emergency response and recovery following a major disaster. The benefit-cost analysis assumed no dredging or other modifications to Alviso Slough. The benefits of the Emergency Hovercraft Port derive from the replacement value and continuity premium of emergency response personnel and transportation, according to guidance developed by the Federal Emergency Management Agency (FEMA). The present value of the total benefits over 30 years (the period for predicting the risk of a major earthquake) range from approximately $10.5 to $33.8 million. The Emergency Hovercraft Port concept entails relatively low levels of public investment, the highest cost associated with purchase of a hovercraft. The total costs of capital investment, annual operations and emergency operations would range from approximately $2.6 to $15.5 million, varying primarily with the size of the hovercraft and extent of new construction. For example, a hovercraft could use the existing boat launch and parking area at the Alviso Marina County Park or a newly constructed landing pad and storage facility. The benefit-cost ratio is between 2.2 and 4.0, signifying a net benefit to the region. **Table 3** provides additional detail on the overall benefits and costs of the Emergency Hovercraft Port concept.

Table 3. Emergency Hovercraft Port Benefit-Cost Summary, 2011-2040

Alviso Emergency Hovercraft Port (30 yrs)	Low	High
Total Benefits	$10,531,000	$33,789,00
Total Costs	$2,628,000	$15,510,000
Benefit-Cost Ratio	***4.0***	***2.2***

Source: AECOM

THE EMERGENCY HOVERCRAFT PORT CONCEPT would have net benefits for the South Bay, increasing its capacity for emergency response and recovery following a major disaster.

Entertainment Waterfront

The Entertainment Waterfront concept includes approximately 83,000 square feet of destination restaurant development along the Alviso waterfront. The new development would be located adjacent to Alviso Slough and the Bay Trail, leveraging Alviso's proximity to the Bay. The Entertainment Waterfront concept would improve the existing Bay Trail segment with enhanced landscaping and access to the Bay. The Alviso Slough Restoration Project and South Bay Salt Ponds Restoration Project will also widen Alviso Slough, improving the waterfront experience and creating a draw for the Entertainment Waterfront concept. **Figure 9** illustrates a conceptual plan for the Entertainment Waterfront concept, and **Figure 10** presents before and after simulations of the development.

Construction of the Entertainment Waterfront concept in Alviso poses potential challenges, due to its proposed location adjacent to Alviso Slough and the flood control levee. The US Army Corps of Engineers and SCVWD have regulatory authority over the levee along the slough and restrict any construction that would alter the levee or compromise its stability. As a result, any buildings must be set back from the levee, and landscaping must be placed in fill or planters that contain their roots. The regulatory agencies may allow the placement of fill between the Entertainment Waterfront buildings and the levee, so long as it does not cause the levee to settle. This issue would require further geotechnical analysis in the future stages of implementation. In addition, the proposed overlook in Alviso Slough would require additional permitting, due to the construction of the pilings in the waterway. **Figure 11** illustrates a section of the Entertainment Waterfront concept, including these challenges.

A waterfront in Alviso with many amenities presents a distinct private investment opportunity. The City of San José would substantially reduce entitlement risk by updating the specific plan and assuming the responsibilities of permitting and sufficient enhancement to the Bay Trail and waterfront to catalyze development, a total public investment of approximately $4.2 million. The overall economic benefit-cost ratio of the Entertainment Waterfront concept is 44.6. The high economic benefit-cost ratio can be partially attributed to the relatively low public investment costs versus expected private investment, as the development would require $33 million in private investment. The development would provide approximately $4.4 million in tax revenues to the City of San José, not including indirect or induced fiscal benefits that may be realized through the project. The result is a fiscal benefit-cost ratio of 1.1. **Table 4** provides additional detail on the benefits and costs of the Entertainment Waterfront concept.

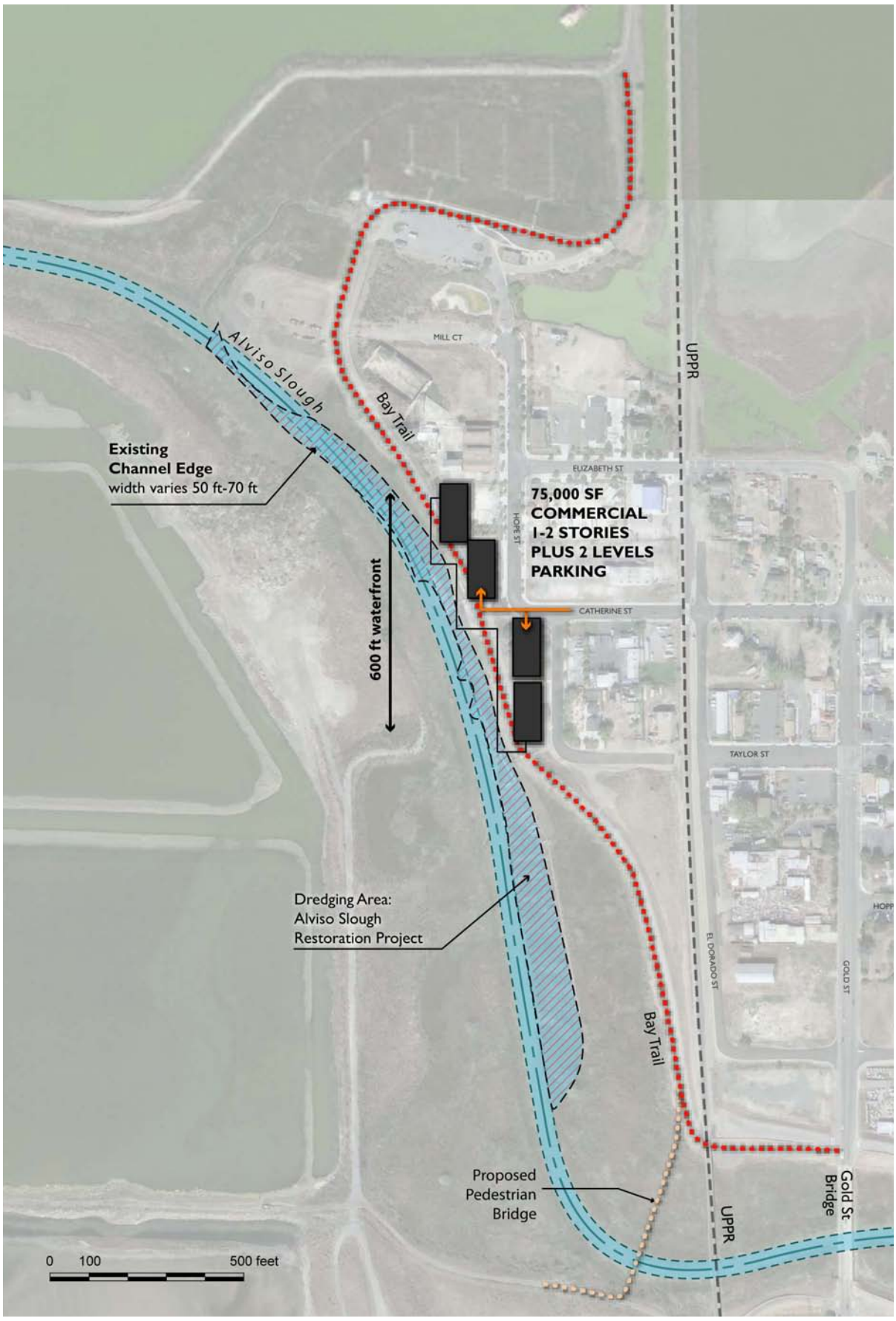
Table 4. Entertainment Waterfront Benefit-Cost Summary, 2011-2030

Alviso Entertainment Waterfront (20 yrs)	Low	High
Total Benefits	$185,519,000	$4,402,000
Total Costs	$4,158,000	$4,158,000
Benefit-Cost Ratio	***44.6***	***1.1***

Notes: Economic benefit is the present value of the direct increase in earnings from the Entertainment Waterfront over the 20-year period. The fiscal benefit is the present value of the projected taxable sales and property tax directed to the City of San José's General Fund over the same 20-year period.

Source: AECOM

Figure 9. Entertainment Waterfront Conceptual Plan



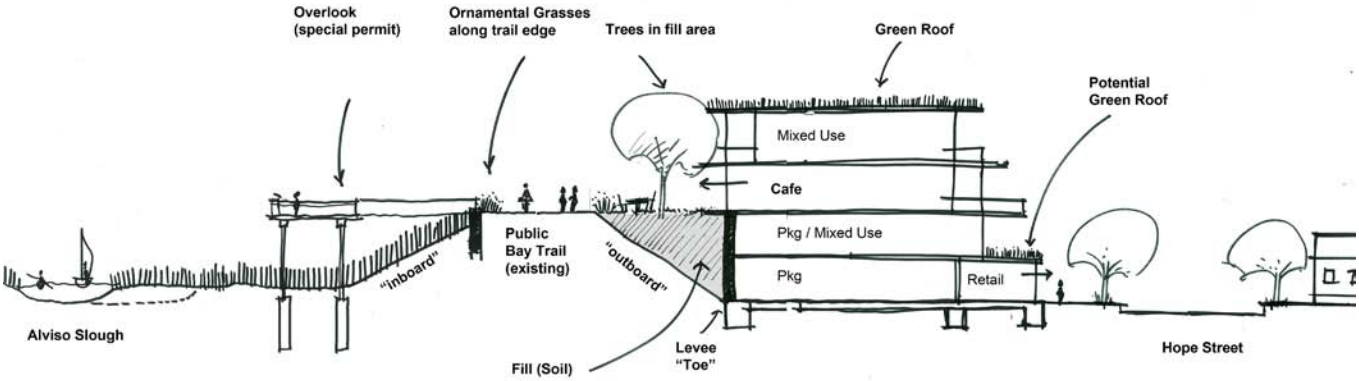
Source: AECOM

A waterfront destination would attract residents from the surrounding area and provide economic development for Alviso.

Figure 10. Entertainment Waterfront

Source: AECOM

Figure 11. Entertainment Waterfront Section



Source: AECOM

Impacts to the South Bay

Analysis of the economic impacts of the Emergency Hovercraft Port and Entertainment Waterfront found that both concepts would result in net benefits to the South Bay.

Figure 12. Emergency Hovercraft Port Response Area (2035 Projections)

Source: ABAG, AECOM

Emergency Hovercraft Port

The Emergency Hovercraft Port concept would continue Alviso's maritime legacy and benefit the South Bay in the event of a major disaster. The majority of the benefits are associated with emergency response: over 20,000 residents and 50,000 employees are within a 1-hour walk of the proposed Emergency Hovercraft Port concept site (**Figure 12**). The total number of residents and employees is projected to grow substantially over the next 25 years with an estimated approximately 56,000 residents and 100,000 employees by 2035 (ABAG 2009). An emergency port in Alviso would increase the South Bay's capacity for emergency response, particularly following a disaster that has disabled roads and bridges. The Emergency Hovercraft Port concept would facilitate access for as many as 1,400 additional first response personnel to Alviso. Recovery transportation following initial emergency response would provide up to 1,200 passenger trips via hovercraft ferry between Alviso and San Francisco.

The Emergency Hovercraft Port concept may yield additional benefits not necessarily limited to emergency response and recovery transportation. For example, the San José Fire Department could use a hovercraft to respond to calls for assistance in Alviso Slough and the San Francisco Bay. A

hovercraft could also provide opportunities for commercial recreation in and around Alviso, conceivably providing commercial transport during major events such as 49er football games. Development of a hovercraft ferry in the long-term may be another option to expand the capacity and the benefits of the current Emergency Hovercraft Port concept. After accounting for costs, the net present value of the emergency response and recovery transportation benefits provided by the Emergency Hovercraft Port concept ranges from approximately $7.9M to $18.3M over 30 years. Opportunities exist for regional cost-sharing of development and operations.

Entertainment Waterfront

The Entertainment Waterfront concept would spur economic development while retaining the community's small-town character, consistent with the goals of the Alviso Master Plan. Benefits would include the total one-time and ongoing impacts to the economy generated by construction and ongoing operations, as well as positive fiscal benefits to the City of San José. The Entertainment Waterfront concept would generate direct economic output impacts of $530 million in Santa Clara County over 20 years. Indirect and induced impacts arising from subsequent rounds of purchases generated by the direct impact would create an additional $240 million in output. The concept would also create 621 new jobs in Santa Clara County over the 20-year period. This includes direct impacts of approximately 140 jobs during the construction period and an average of approximately 360 annual jobs. Other vendor and employee purchases would generate 121 additional jobs throughout the economy in indirect and induced impacts (**Table 5**).

The direct benefit would be the present value of the increase in total estimated earnings from construction and the 20-year operations of the Entertainment Waterfront concept, estimated at approximately $186 million. Indirect and induced impacts would generate an additional $70 million in earnings (**Table 5**). The City of San Jose would also receive direct fiscal benefits from the Entertainment Waterfront concept, with a total present value of $4.1 million in sales tax and $280,000 in property taxes.

Table 5. Entertainment Waterfront Economic Benefits, Santa Clara County

	Direct	Indirect & Induced	Total Impacts
Output Impacts			
One-Time Construction Economic Impacts	$28,486,000	$13,083,000	$41,569,000
Operations Economic Impacts (2011-2030)	$503,860,000	$226,159,000	$730,019,000
Total Output Impacts	***$532,346,000***	***$239,242,000***	***$771,588,000***
Earning Impacts			
One-Time Construction Economic Impacts	$190,000	$70,000	$260,000
Operations Economic Impacts (2011-2030)	$185,330,000	$69,526,000	$254,856,000
Total Output Impacts	***$185,520,000***	***$69,596,000***	***$255,116,000***
Employment Impacts			
One-Time Construction Economic Impacts	142	67	209
Operations Economic Impacts (2011-2030)	358	54	412
Total Output Impacts	***500***	***121***	***621***

Source: AECOM, IMPLAN

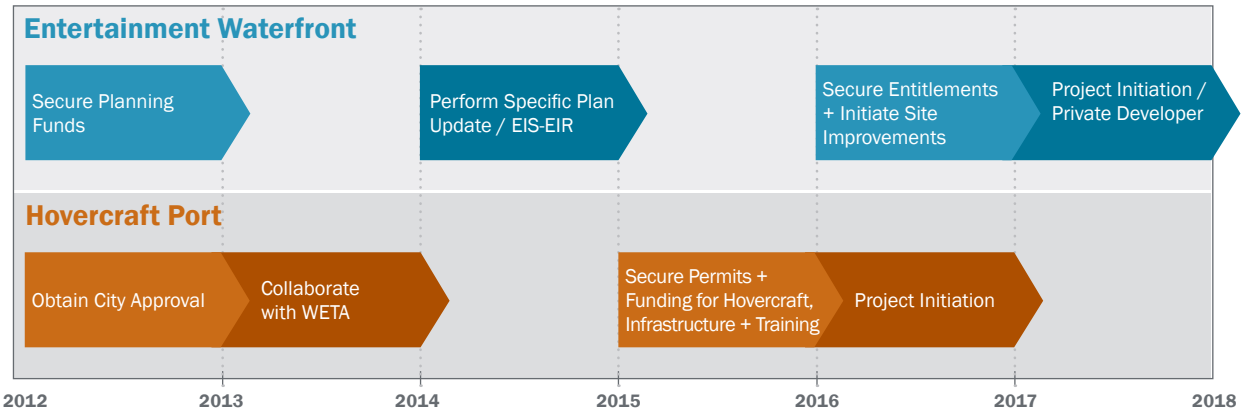
Implementation & Financing

The South San Francisco Bay Emergency Port Access Study found both the Emergency Hovercraft Port and Entertainment Waterfront concepts to be feasible. The two concepts complement one another and may be pursued simultaneously.

Implementation

Project initiation would likely require at least five years, as both concepts would require additional planning and permitting, collaboration with multiple stakeholders and the identification of funding sources (**Figure 13**). The first step is securing funds to perform more detailed site analysis and land use planning. Because this study did not analyze a specific project, the implementation agencies will need to complete an Environment Impact Statement/Environmental Impact Report (EIS/EIR) and obtain regulatory approval from the Bay Conservation and Development Commission, the U.S. Department o Fish and Wildlife and the City of San José, among others. For the Entertainment Waterfront concept, the City will need to update the Alviso Specific Plan along the waterfront and obtain the appropriate permits, in order to create sufficient certainty to facilitate development.

Figure 13. Implementation Timeline



Coordination with stakeholders throughout the Bay Area will be instrumental to implementation of the Emergency Hovercraft Port and Entertainment Waterfront concepts.

Partners

Coordination with stakeholders throughout the Bay Area will be instrumental to implementation of the Emergency Hovercraft Port and Entertainment Waterfront concepts. For both concepts, collaboration between the City of San José, San Jose-Silicon Valley Chamber of Commerce, Santa Clara Valley Water District and Santa Clara County will be key to moving forward. Emergency management agencies at the regional, state and federal levels coordinate most emergency planning efforts and provide funding sources. Forging a partnership with the Water Emergency Transportation Authority, which oversees the planning and funding of the region's ferry system and water-based emergency response, will be crucial for implementation of the Emergency Hovercraft Port concept. Additionally, coordination of emergency planning efforts with NASA and facilities at Moffett Field should be considered. Implementation of the Entertainment Waterfront concept will require coordination with the Bay Trail, Bay Conservation and Development Commission, and other permitting agencies. **Table 6** illustrates potential partners to move forward with implementation of the Emergency Hovercraft Port and Entertainment Waterfront concepts.

Table 6. Potential Partners

	Entertainment Waterfront	Emergency Hovercraft Port
Local Stakeholders	• City of San José • San Jose-Silicon Valley Chamber of Commerce • Santa Clara Valley Water District • Santa Clara County	• City of San José • San Jose-Silicon Valley Chamber of Commerce • Santa Clara Valley Water District • Santa Clara County
Regional Stakeholders	• Bay Trail • San José Parks, Recreation + Neighborhood Services	• Water Emergency Transportation Authority • California Emergency Management Agency • Bay Area Urban Area Security Initiative • Metropolitan Transportation Commission
Regulatory Bodies	• Bay Conservation + Development Commission • Santa Clara Valley Water District • Federal + State Permitting Agencies	• California Emergency Management Agency • Federal Emergency Management Agency • Unites States Coast Guard

Source: AECOM

Funding

A variety of potential funding sources may help finance development of both the Emergency Hovercraft Port and Entertainment Waterfront concepts. Grants administered by FEMA, California Emergency Management Agency and the Bay Area Urban Area Security Initiative fund projects by cities and counties for planning and coordination, construction and equipment purchase to improve emergency preparedness and response capabilities, while the US Fish and Wildlife Service and California Department of Boating and Waterways fund the construction of boating infrastructure. **Table 7** presents potential funding sources for the Emergency Hovercraft Port concept. A wide variety of public and private grant funding is available for economic revitalization, notably from the US Department of Housing and Urban Development and the US Environmental Protection Agency. Funding is available from California's Proposition 84, transportation agencies and the San Jose Parks, Recreation and Neighborhood Services Department for waterfront revitalization and trail improvements. In addition, several state programs offer low-interest loans for the construction of commercial and recreation-oriented projects. **Table 8** presents potential funding sources for the Entertainment Waterfront concept.

Sea Level Rise

Given Alviso's location on the San Francisco Bay, any future planning should consider the risks related to sea level rise. Both the Emergency Hovercraft Port and Entertainment Waterfront concepts have opportunities to plan for and adapt to rising water levels. Planning can include strategies to improve flood protection before construction or create the flexibility to improve flood protection over time. For example, should the Emergency Port concept include a new hovercraft pad, this facility should be constructed above the projected future flood elevation (including sea-level rise) or allow flexibility for raising its elevation in the future. The Entertainment Waterfront concept should consider levee improvements (increasing both the levee height and base) to maintain the same level of flood protection and ensure levee stability as water levels increase. Drainage improvements and increased pumping may also be needed to prevent ponding of low-lying areas. One adaptation strategy for the Entertainment Waterfront concept would be to use the first level for parking rather than furnished commercial space in order to minimize the consequences of any extreme flooding events. Future planning for both concepts should consider sea level rise adaptation strategies up front.

Table 7. Potential Emergency Hovercraft Port Funding Sources

Funding Source	Agency	Eligible Activities	Potential Application to Alviso	Funding Availability/Status
Federal Funding				
Competitive Training Grants Program	Federal Emergency Management Agency	High priority national homeland security training; focus areas determined per grant cycle - i.e., regional collaboration, citizen evacuation, critical infrastructure protection	Personnel training	FY08 grants totaled $27.2M, ranged $1.1M-$3.6M; current funding status uncertain
Environmental Planning and Historic Preservation Program	Federal Emergency Management Agency	Compliance with other FEMA grants for construction/ renovation involving historic property, special-status species, wetlands/water bodies, hazardous materials	Hovercraft landing area or hangar construction; levee improvements	Amounts not specified
Boating Infrastructure Grant Program	US Fish and Wildlife Service	Construction, renovation and maintanence of tie-up facilities for recreational boats (nontrailerable) 26 feet or longer	Hovercraft landing area; project planning, economics, environmental assessment and design	FY11 grants totaled $10M; $100K CA max for Tier 1 projects; no max for larger Tier 2 projects
State Funding				
State Homeland Security Grant Program	California Emergency Management Agency	Depend on national priorities for planning, organization, equipment, training and exercise to prevent, protect against, respond to and recover from catastrophic events and terrorism	Hovercraft purchase; personnel training; detailed staging and response plans	FY10 grants to Santa Clara County totaled $3.8M
Emergency Management Performance Grants	California Emergency Management Agency	Planning, training, and equipment purchase for emergency preparedness, response and recovery; construction activities limited to Emergency Operation Centers	Hovercraft purchase; personnel training	FY10 grants totaled $14M, included $446K to Santa Clara County; Min $125K; 100% match
Boat Launching Facility Grants and Loans	Department of Boating and Waterways	Construction of small craft boating launching facilities	Hovercraft landing area or hangar construction; public access	FY10 grants totaled $2.3M; FY03 included $2.2M for Alviso County Boat Launch
Local Funding				
Regional Catastrophic Preparedness Grant Program	Bay Area Urban Area Security Initiative	Development of integrated plans, procedures, and protocols to address catastrophes; personnel; training	Detailed staging and response plans	FY11 funding status uncertain; FY10 grant totalled $3.75M to 11 counties, 23 cities; 25% match
Urban Area Security Initiative Grant	Bay Area Urban Area Security Initiative	Planning, organization, equipment, training, and exercise to prevent, protect against, respond to and recover from terrorism in high-threat, high-density urban areas	Hovercraft purchase; personnel training; detailed staging and response plans	FY10 grant totalled $34M for regional hubs in 10-county area; reimbursement grant

Source: AECOM

Table 8. Potential Entertainment Waterfront Funding Sources

Funding Source	Agency	Eligible Activities	Potential Application to Alviso	Funding Availability/Status
Federal Funding				
Entitlement Communities Grants	Dept of Housing and Urban Development-Community Development Block Grant	Property acquisition, demolition, rehabilitation, public facility construction, public services for neighborhood revitalization, economic development	Land acquistion; parking and infrastructure development; Bay Trail/ waterfront improvements; historic preservation/reuse	Grant amount determined by formula; to local governments
Section 108 Loan Guarantee Program	Dept of Housing and Urban Development-Community Development Block Grant	Property acquisition, demolition, rehabilitation, public facility construction, meeting urgent low/moderate-income needs	Land acquistion; parking and infrastructure development; Bay Trail/ waterfront improvements; historic preservation/reuse	CDBG allocations used as loan security for local governments; FY06 grants ranged $750K-$19M
Brownfields Economic Development Initiative	Dept of Housing and Urban Development-Community Development Block Grant	Enhance security/improve viability of Section 108 loan projects	Land acquistion; parking and infrastructure development; Bay Trail/ waterfront improvements; historic preservation/reuse	Paired with Section 108 Loan; current NPL sites excluded; FY10 grants totaled $17.5M, max per grant TBD; FY09 grants $1M-$2M
Superfund Technical Assistance Grants	US Environmental Protection Agency	Technical assistance and community involvement related to reuse	Project planning, economics, environmental assessment, and design	$50K to community groups
Superfund Redevelopment Pilot Program	US Environmental Protection Agency	Reuse financial assistance, outreach and planning	Project planning, economics, environmental assessment, and design	$100K max to local governments
Brownfield Assessment Grants	US Environmental Protection Agency	Reuse assessment, cleanup, job training and revolving loan fund	Project planning, environmental assessment, economics, design; historic preservation/reuse	$350K max per site or $1M max for five hazardous sites
Brownfields Area-Wide Planning Pilot Program	US Environmental Protection Agency	Reuse assessment, cleanup and planning in economically-disadvantaged communities	Project planning, environmental assessment, economics, design; historic preservation/reuse	$175K max to local governments
Rivers Trails and Conservation Assistance Program	National Park Service	Community assistance for waterway and open space conservation, trails and greenways development	Waterfront/Bay Trail improvements	Staff and organizational support
State Funding				
Proposition 84 - Sustainable Communities Planning Grants	Strategic Growth Council	Urban revitalization, community/ economic development, infrastructure improvement	Project planning	Grants range $100K-$1M; FY10 grants totaled $22M; 20% set aside for economically disadvantaged communities
Proposition 84 - River Parkways and Urban Streams Restoration	CA Resources Agency/Dept of Water Resources	Urban waterfront revitalization, trail improvements, river access/recreation, flood management, habitat restoration, interpretation	Land acquisition, Bay Trail/ waterfront improvements	FY10 grants ranged $130K-$2.5M; no min; match encouraged
Proposition 84 - State Coastal Conservancy grants	CA Coastal Conservancy	Urban waterfront revitalization, trail improvements, coastal access/recreation, habitat restoration	Land acquisition; waterfront/ Bay Trail landscaping planning, design and construction	Grant amount determined by need; $108M available; match encouraged
Local Funding				
Transportation Development Act Funds	Metropolitan Transportation Commission	Pedestrian and bicycle improvements and maintenance	Bay Trail/waterfront improvements	FY10 grants to Santa Clara County totaled $82M
2010 Regional Transportation Improvement Program	Metropolitan Transportation Commission	Pedestrian and bicycle improvements, signage and landscaping	Bay Trail/waterfront improvements	$6.2M available for Santa Clara County

Source: AECOM

Our Mission

The South Bay has the opportunity to enhance emergency response and create a unique waterfront experience with a highly amenitized shoreline that includes access to wildlife-oriented recreation on a dynamic bayland. The waterfront will also allow first responders to use Alviso as a port of entry to augment emergency services likely to be overstretched during a major catastrophic event. The scenarios recommended in this report balance the ecological importance of the South Bay with the economic development and emergency response needs of Alviso and the region. The result is a multi-use waterfront capable of serving as an access point for first responders while supporting ongoing recreation and entertainment opportunities South Bay residents. The realization of this vision will required the continued leadership, perseverance, and local community energy to fulfill a goal long established by local business and community leaders to build upon Alviso's maritime history and restore a vibrant waterfront experience.

References

Association of Bay Area Governments. 1999 (March). *Riding Out Future Quakes*. Proceedings of Five Subregional Workshops in October and November 1998. Oakland, CA.

Bay Area Council. 2006 (April). *The Bay – The Transportation Spine for Disaster Recovery*. A report of the Blue Ribbon Task Force on Disaster Recovery Water Transit. San Francisco, CA.

Blue Ribbon Task Force. 1999 (May). *Bay Area Water Transit Initiative Action Plan*. Bay Area Council and Bay Area Economic Forum. San Francisco, CA.

City of San José. 2010 (June 17). 2010-2011 Adopted Operating Budget. San Jose, CA.

—1998 (December). *Alviso Master Plan: A Specific Plan for the Alviso Community*. Adopted by the City Council on December 7, 1998. Department of Planning, Building and Code Enforcement, San Jose, CA.

—2004 (August 17). *Emergency Operations Plan*. Adopted by the City Council, August 17, 2004, updated December 6, 2005. San Jose, CA.

Federal Emergency Management Agency. 2001 (May 1). *What Is A Benefit? Guidance on Benefit-Cost Analysis of Hazard Mitigation Projects, Draft, Revision 2.0*. Federal Emergency Management Agency, Flood Insurance and Mitigation Administration. Washington, DC.

San Francisco Bay Area Water Transit Authority. 2003 (July). *A Strategy to Improve Public Transit with an Environmentally Friendly Ferry System: Final Implementation and Operations Plan*. San Francisco, CA.

Santa Clara Valley Water District. 2009a (November). *Alviso Slough Restoration Project: Final Environmental Impact Report*. Prepared by EDAW AECOM.

United States Geological Survey. 2008. Forecasting California's Earthquakes—What Can We Expect in the Next 30 Years? USGS Fact Sheet 2008-3027.

Santa Clara Valley Water District

THE COUNTY OF SANTA CLARA 1850

SAN JOSE SILICON VALLEY CHAMBER OF COMMERCE

CITY OF SAN JOSE CAPITAL OF SILICON VALLEY

AECOM